REFERENCES

- Albrecht, F. O. 1955. La densité des populations et la croissance chez Schistocerca gregaria (Forsk.) et Nomodacris septemfasciato (Serv.); la mue d'ajustement. Journal d'Agriculture Tropicale et de Botanique Appliquée, 2: 109–192.
- Collins, G. B. 1988. Cast skins of insects as subjects for microscopic study: a simple procedure for making slides. *Bulletin of the Amateur Entomologists' Society*, **47**: 173–174.
- Duarte, A. J. 1938. Problems of growth of the African Migratory Locust. Bulletin of Entomological Research, 29: 425-456.
- Dyar, H. G. 1890. The number of molts of lepidopterous larvae. Psyche, 5: 420-422.
- Hassall, M. & Grayson, F. W. L. 1987. The occurrence of an additional instar in the development of *Chortlippns brimneus* (Orthoptera: Gomphocerinae). *Journal of Natural History*, 21: 329–337.
- Kelly-Stebbings, A. F. and Hewitt, G. M. 1972. The laboratory breeding of British Gomphocerine grasshoppers (Acrididae: Orthoptera). *Acrida*, 1: 233–245.
- Mason, J. B. 1954. Number of antennal segments in adult Acrididae (Orthoptera). *Proceedings of the Royal Entomological Society of London (B)*, **23**: 228–238.
- Moriarty, F. 1969. The laboratory breeding and embryonic development of *Chorthippus brunneus* Thunberg (Orthoptera: Acrididae). *Proceedings of the Royal Entomological Society of London* (A), 44: 25–34.
- Parker, J. R. 1930. Some effects of temperature and moisture upon *Melanoplus mexicanus* mexicanus Saussure and Camuula pellucida Scudder (Orthoptera). Bulletin of the Montana Agricultural Experiment Station no. 223.
- Richards, O. W. & Waloff, N. 1954. Studies on the biology and population dynamics of British grasshoppers. *Anti-Locust Bulletin*, 17.
- Shotwell, R. L. 1941. Life histories and habits of some grasshoppers of economic importance on the Great Plains. Technical Bulletin No. 774, United States Department of Agriculture, Washington, D.C.
- Smith, D. S. 1959. Utilisation of food plants by the migratory grasshopper *Melanoplus bilituratus* (Walker) (Orthoptera: Acrididae), with some observations on the nutritional value of the plants. *Annals of the Entomological Society of America*, **52**: 674–680.
- Uvarov, B. 1966. Grasshoppers and Locusts: A Handbook of General Acridology, Volume 1. Cambridge University Press.

SHORT COMMUNICATION

Stigmns pendulus (Panzer) (Hymenoptera: Sphecidae) associated with ancient woodlands in south-east London.—Since Stigutus pendulus was first discovered in Britain by Allen (1987) it has remained rather a mystery. At the time of Falk's review (1991) it was known only from Allen's original East Kent specimen and two more from the other side of the Thames in South Essex. Published records seem few: Uften (1997, 1998) has recorded it twice from Hertfordshire. However, it is obviously much more widespread and there are many more records from South Essex (P. R. Harvey, personal communication) and Surrey (Baldock, in preparation). I was not, therefore, too surprised to find it at several localities in the London area.

What I did find surprising, or at least ironic, is that here it seems to be associated with ancient woodland! So far *Stigmus pendulus* has been found at four sites.

Sydenham Hill Woods, Dulwich (TQ3472, Surrey), 20.vi.1993, 30.viii.1993, found by D. W. Baldock in 1997 in Malaise trap material which had been stored in alcohol for several years. Sydenham Hill and Dulwich Woods are reckoned to be remains of the "Great North Wood", a series of oak copses and wooded commons extending through south-east London from Selhurst to Brockley. A large number of

acknowledged ancient woodland indicator species have been recorded from the site

(Jones, in preparation).

Woodlands Farm, Bexley (TQ4476, West Kent), 9.ix.1998, a single specimen sweeping at the edge of a large field, once arable, but which had lain fallow for about 10 years. Nearby was a patch of old oak woodland and the renowned ancient woodland SSSI Oxleas Wood was less than a kilometre away.

Woodland Walk, Downham, (TQ3871, West Kent) 16.vi.1999, one swept. Woodland Walk is a curious narrow wooded path, zigzagging at right angles between the houses and gardens of the Downham estate, laid out in the 1930s. It is recognizable on maps from the middle of the 19th century and is possibly the remains of an old green lane following ancient hedgerows and field boundaries. Numerous acknowledged ancient woodland "indicator" species were also found on the site (Jones, in preparation).

Mayow Park, Lower Sydenham (TQ3571, West Kent), 9.vi.1999, one found by sweeping. Although primarily playing fields with close-mown utility grass, this small park is dominated by many ancient pollard oaks which predate the landscaping of

the park in 1877.

South-east London might not immediately be linked, in most people's minds, with ancient woodland, a scarce and vulnerable habitat, but various of the local open spaces are obvious survivors from the era before urbanization; they contain large mature trees and numerous ancient woodland "indicator" species. It is unlikely that *Stigmus pendulus* has any true association with ancient woodland, and is more likely to be generally associated with woods in general. In Surrey it is known from parks, gardens and commons, often in company with *Stigmus solskyi* (D. W. Baldock, personal communication). It will be interesting to see, as further records of *Stigmus pendulus* appear, whether any wider association with old woodland emerges.

Acknowledgements—My thanks to David Baldock and Peter Harvey for their information on this species.—RICHARD A. JONES, 135 Friern Road, East Dulwich,

London SE22 0AZ. bugmanjones@hotmail.com

REFERENCES

Allen, G. W. 1987. Stigmus pendulus Panzer (Hymenoptera, Sphecidae) new to Britain. Entomologist's Gazette 38: 214.

Baldock, D. W. in preparation. Bees, wasps and ants of Surrey. Surrey Wildlife Trust.

Falk, S. 1991. A review of the scarce and threatened bees, wasps and ants of Great Britain. Peterborough: Nature Conservancy Council. p. 152.

Jones, R. A. in preparation. The insects of Sydenham Hill and Dulwich Woods—indicators of ancient woodland.

Uffen, R. W. J. 1997. [Exhibit of *S. pendulus* from Welwyn, at BENHS meeting 8 October 1996.] *British Journal of Entomology and Natural History* 10: 117.

Uffen, R. W. J. 1998. [Exhibit of *S. pendulus* from Tyttenhanger at BENHS Annual Exhibition 2 November 1996.] *British Journal of Entomology and Natural History* 10: 181.